DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

DATE: August 17, 2017

FROM: Brent A. Story, P.E., State Design Policy Engineer

TO: Divisions of Engineering, Permits/Operations, Local Grants/Field Districts, Construction, TIA and P3/Program Delivery

SUBJECT: Cable Barrier Special Design Detail

Effective September 1, 2017, the attached *Cable Barrier Special Design Detail* has been developed for use on all new permanent installations and full replacements of cable barrier inside the median of a divided highway. The detail was prepared with respect to guidelines published in the 2011 AASHTO Roadside Design Guide. The Department will publish this Special Design Detail as a formal GDOT Construction Standard as soon as we receive concurrence from FHWA.

The following procedures shall be followed on all cable barrier installations:

1) The Cable Barrier Special Design Detail will be provided in all Plan Submittal Packages where cable barrier is to be installed.
2) Cable barrier shall be installed per the manufacturer's instructions and specifications.
3) Slope controls inside the median (foreslope and backslope) are based on median ditch width.
4) If the far-side approach backslope is WITHIN clear zone it must be graded to applicable slope specifications as shown on the Cable Barrier Special Design Detail.
5) If the far-side approach backslope is OUTSIDE clear zone it may vary no steeper than 2:1.

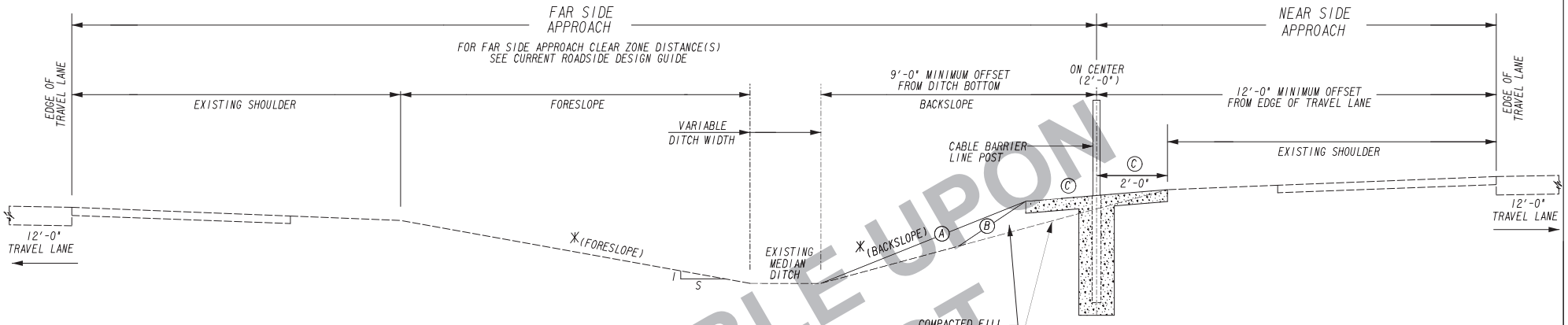
The Cable Barrier Special Design Detail is maintained by the Office of Design Policy and Support and is available upon request. If you have any questions contact Frank Flanders (fflanders@dot.ga.gov) at (404) 631-1663 or Holly Cross (hcross@dot.ga.gov) at (404) 347-0578.

Attachment
BAS:DGP:fbf

Cc: Federal Highway Administration, Georgia Division
American Council of Engineering Companies (ACEC)/Georgia Chapter
Georgia Highway Contractors Association (GHCA)

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

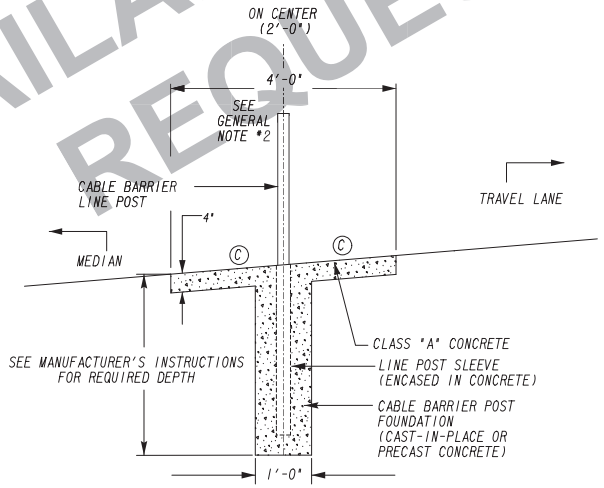
TYPICAL CABLE BARRIER DETAIL
ARTERIALS/FREEWAYS



NOTE: SLOPE CONTROLS ARE BASED ON DITCH WIDTH.

* CABLE BARRIER OR BACKSLOPE WITHIN CLEAR ZONE			
EXISTING FORESLOPE (S:1)	EXISTING MEDIAN DITCH WIDTH	REQUIRED BACKSLOPE (A)	TEST LEVEL (TL)
6:1	2'-0"	4:1 OR FLATTER	MEETS TL-3
4:1	4'-0"	4:1 OR FLATTER	MEETS TL-3
4:1	2'-0"	6:1 OR FLATTER	MEETS TL-4
* CABLE BARRIER AND BACKSLOPE OUTSIDE CLEAR ZONE			
EXISTING FORESLOPE (S:1)	EXISTING MEDIAN DITCH WIDTH	REQUIRED BACKSLOPE (B)	TEST LEVEL (TL)
NOT APPLICABLE OUTSIDE CLEAR ZONE	NOT APPLICABLE OUTSIDE CLEAR ZONE	NO STEEPER THAN 2:1	NOT APPLICABLE OUTSIDE CLEAR ZONE

REQUIRED SLOPE FOR CABLE BARRIER CONCRETE PAD		
4'-0" CONCRETE PAD	REQUIRED SLOPE (C)	TEST LEVEL (TL)
	MATCH EXISTING SHOULDER SLOPE (10:1 OR FLATTER PREFERRED)	IF 4:1 MEETS TL-3
	SLOPE SHALL BE NO STEEPER THAN THE FAR SIDE APPROACH BACKSLOPE OR 4:1 (MAX).	IF 6:1 OR FLATTER MEETS TL-4



CABLE BARRIER DETAIL
SEE ABOVE TYPICAL FOR SLOPE REQUIREMENTS

GENERAL NOTES

1) SPECIFICATIONS: GEORGIA STANDARD, CURRENT EDITION & SUPPLEMENTS THERETO.
2) INSTALL CABLE BARRIER PER MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS.

TEST LEVEL (TL-) INFORMATION

TEST LEVEL(S) ARE NUMERICAL TEST DESIGNATIONS BASED ON MASH AND/OR NCHRP 350 TEST SPECIFICATIONS. THESE LEVELS ARE USED TO IDENTIFY CRITERIA AND REQUIREMENTS FOR ROADSIDE SAFETY HARDWARE SUCH AS LONGITUDINAL BARRIERS, END TREATMENTS, ETC.

THESE TEST LEVELS (WHICH ARE ABBREVIATED TL-) SIMULATE VARIOUS ROADSIDE BARRIER IMPACT, CONTAINMENT, DEFLECTION AND/OR REDIRECT CONDITIONS BASED ON VARIABLES SUCH AS VEHICLE TYPE, IMPACT SPEED AND IMPACT ANGLE.

TEST LEVEL (TL-3) - BASED ON IMPACT TESTS OF PASSGENGER VEHICLES.

TEST LEVEL (TL-4) - BASED ON IMPACT TESTS OF SINGLE UNIT TRUCKS.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

SPECIAL DESIGN
CABLE BARRIER DETAIL AND PLACEMENT

NO SCALE AUGUST 2017

DATE	REVISION	BY
		DES. FBF DRW. HAC CHK. BAS REV.